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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,293	04/12/2006	Becky Bossidan	2003005503	1337
22879 7590 08/04/2009 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER				
RODÉE, CHRISTOPHER D				
ART UNIT		PAPER NUMBER		
1795				
NOTIFICATION DATE		DELIVERY MODE		
08/04/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/575,293

Applicant(s)

BOSSIDAN ET AL.

Examiner

Christopher RoDee

Art Unit

1795

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16, 18, 20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-27 is/are allowed.
- 6) ☒ Claim(s) 1-14, 16, 18 and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date 4/24/09
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

Claims 1-14, 16, 18, and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As noted in the last Office action, the instant claims specify an image formed using the black toner exhibits an optical density fading of less than 22.6 % when exposed to a light having a spectrum of from about 270 to about 800 nm for a period of time of about 216 hours. Amended claim 12 presents a range of optical density fading of from 10.3 % to less than 22.6 %. Amended claim 20 presents a Markush group of pigments for the black toner particle of claim 1. The specification as filed fails to disclose this range of optical density and do not disclose it for all "black toner" within the scope of the claims as discussed in the Office action of 29 January 2009.

Applicants traverse the rejection as previously set forth and rely on the Table on specification page 5 where the inventive toner has an optical density of 10.3 % while the comparative toner has an optical density of 22.6 % (see response pp. 8 & 9). This characteristic is for a black liquid toner (see spec. p. 5, l. 4-7). Applicants also rely on specification page 6, lines 1-25 where improvements in light fastness, generally, and improvements in optical density fading over the K3.1 toner are disclosed. Applicants note that various pigments are disclosed and benefits in fade resistance are obtained. Applicants also take the position that all improvements in light fastness are disclosed as being with respect to the K3.1 toner and based

on these disclosures and others referenced in the response, the artisan would see a written description of the claimed invention.

The Examiner has carefully considered applicants' remarks and has reviewed the specification in detail. Although the specification does disclose an improvement with respect to the K3.1 toner, the only disclosed numeric optical density fading is for a black liquid toner having an optical density fading of 10.3 %. The general disclosure of an improvement over one comparative liquid toner's optical density fading does not provide a written description of any value of optical density fading over that of this single comparative. The fact that the specification discloses other materials that can be used to obtain a black liquid toner according to the invention does not provide a description of the claimed numeric range of optical density fading nor does it disclose it for a dry toner, as in claim 18.

The Examiner specifically challenges applicant's assertion that, "No question exists among those of ordinary skill that the present specification discloses an improvement in black toner. " This assertion is without any support, evidence, or basis. The specification, as discussed previously, "does not describe any light fastness values for black toner other than a liquid toner. The claims include dry toner as evidenced by pending claim 18. There is no disclosure of any numeric light fastness value for a dry toner." Further, the only improvement is for the liquid black toner and where the optical fading density is 10.3 %.

With respect to applicant's position in the paragraph spanning pages 9 and 10, the Examiner relies on the position taken in the last Office action, as follows. "It is evident that the specification does not describe a light fastness value of 22.6 % for the inventive black liquid toner. It is also evident that the specification does disclose a light fastness value of 10.3 % for the inventive black liquid toner. Beyond that, the specification provides no description of a numeric value(s) or range(s) of light fastness for the black toner. The specification teaches that

selection of pigment can give improved fade resistance as noted by applicant (spec. p. 6, l. 20-25), but this does not disclose any numeric value(s) or range(s) of light fastness for the inventive toner." Nothing in the traversal shows this position to be in error and it is maintained.

With respect to claim 12's range of optical density fading of from 10.3 % to less than 22.6 %, the remarks above concerning the lack of § 112, first paragraph, written description for a range of optical density fading are also applicable. Contrary to applicant's assertion, the specification does not disclose a broad numerical range for optical density fading. Consequently, applicants do not have basis in the specification for claiming a narrower range. The discussion in MPEP 2163.05 (III) is not applicable to the instant fact situation.

With respect to claim 13, the rationale for the Examiner's holding of a lack of written description for the claimed optical density fading numeric range is similarly applicable to the claimed chroma range. As discussed in the last Office action, "The specification provides no description of a numeric value(s) or range(s) of chroma change for the black toner other than +0.01. Although the specification does teach that a comparative toner has a change in chroma of +3.45, this does not disclose that all values less than +3.45 are the invention. Further, there is no disclosure of this change in chroma for other types of black toners, such as dry toners." Applicant's remarks concerning the disclosures on specification page 6 and the Table on 5 have been considered, as have the underlying disclosures, but the disclosure of a single numeric value in a single comparative example and the desire to improve over this value does not provide basis for the claimed numeric range which is all chroma values less than +3.45.

The rejection under § 112, first paragraph, for the instant claims as lacking written description as discussed above and in the last Office action is maintained.

Claims 1-14, 16, 18, and 20 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for liquid toners having a change in optical density of 10.3 % after about 216 hours of exposure, does not reasonably provide enablement for all toners, liquid and dry, having a change in optical density of as little as zero or other small values for all exposures of about 216 hours. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

This rejection was presented in the last Office action. In the traversal applicant's review various Court decisions relating to the enablement issue (see response pp. 11 and 12). Applicants specifically address the facts of the instant claims noting that predictability is not of concern for the toner particles of claim 1. Various lightfast pigment groups are disclosed on specification page 6, line 33 to page 7, line 4 and on page 7 at lines 15-23. These pigments are disclosed to balance the color hue of the pigment, but color hue and color fastness are distinct properties. There is no indication that any or even a reasonable number of the compounds that might provide the requisite color hue would also be color fast.

This position is supported because the compounds in the relied upon passages include a very broad group of compounds. For example, the Examiner performed a Chemical Abstracts Registry file search on three of classes of compounds relied upon by applicants. The information from that search is as follows:

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=> s phthalocyanine
L1      18531 PHTHALOCYANINE

=> s dioxazine
L2      895 DIOXAZINE

=> s perylene
L3      6567 PERYLENE
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As is apparent, just experimenting with phthalocyanines, dioxazines, and perylenes would require knowledge of and experimenting with nearly 26,000 different compounds alone and in combinations to give the desired range of optical density fading as required. This level of experimentation cannot be considered reasonable. Predictability is a concern where the claims would require such substantial experimentation because reduced predictability requires more experimentation by the applicant to obtain the desired optical density fading. Applicant's remarks on response pages 12 and 13 are, therefore, not persuasive to overcome the rejection because the pigment groups includes thousands of different compounds as seen in the information from Chemical Abstracts. Also as discussed previously, a review of the specification shows that the pigments disclosed are specific blue and purple pigments. The claims, however, are not limited to these pigments. The claims permit any pigment. The Examiner relies on the previously cited disclosure of Diamond's 50 known liquid toner pigments, which applicant appears to have dismissed as not being "dispositive". The Examiner strongly disagrees. Diamond is pertinent prior art showing compounds known to be used in the liquid toner art. Just experimenting with 50 of these pigments would give 3×10^{64} different combinations to consider. This is not a reasonable level of experimentation.

The above rejected claims are not enabled by the specification for the reasons given in the last Office action and as discussed here. The rejection is maintained.

Allowable Subject Matter

Claims 22-27 are allowed.

Conclusion

Those rejections not repeated are withdrawn.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on Monday to Thursday from 6:00 to 4:30 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1795

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Christopher RoDee/
Primary Examiner
Art Unit 1795

31 July 2009